

1125-35-1517 **Hussein Awala*** (hussein.awala@temple.edu), Department of Mathematics, Temple University, Wachman Hall/1805 N Broad st, Philadelphia, PA 19122. *Mellin Transform Techniques for the Mixed Problem in Two Dimensions.*

In this talk I will discuss the boundary value problem with mixed Dirichlet and Neumann boundary conditions for the Laplacian and the Lamé system in infinite sectors in two dimensions. Using a potential theory approach the problem is reduced to inverting a singular integral operator (SIO) naturally associated with the problem on appropriate function spaces. Mellin transform techniques are then employed in the study of the spectrum of the aforementioned SIO. (Received September 17, 2016)